

CLAIMS

1. An antenna system with controlled directional pattern comprising a flat substrate carrying at least two fan-like oriented directional planar antennas and a commutation switch for controlling directional pattern of said antenna system, wherein said commutation switch is made so as to provide for switching on either of the said antennas or switching on two or more said antennas simultaneously.
2. The antenna system of claim 1, wherein in case the said antennas equipped with reflectors are used, the said commutation switch is placed between the said antennas and fitted with a grounded case, with the side facets of the said commutation switch case being used as reflectors of the said antennas.
3. The antenna system of claim 1, wherein the said antennas are made as traveling-wave antennas, no fewer than three in number, located on the both sides of the substrate, the orientation of the said antennas located on one side of the said substrate being different from the orientation of the said antennas located on the other side of the said substrate.
4. The antenna system of claim 1, wherein it contains an additional antenna comprised of an active element and a reflector, both of them being placed along the line essentially perpendicular to the said substrate.

5. The antenna system of claim 4, wherein the said commutation switch is placed behind the additional antenna and fitted with a grounded case, and the facet of the grounded case of the said commutation switch facing the active element of the said additional antenna is used as the said reflector of the said additional antenna.

6. The antenna system of claim 1, wherein it contains two additional antennas located on different sides of the said substrate and oriented in opposite directions, comprised of an active element and a reflector, placed along the line essentially perpendicular to the substrate.

7. The antenna system of claim 6, wherein the said commutation switch is placed between the said additional antennas and fitted with a grounded case, and the facet of the said case of the commutation switch facing the said active element of the additional antenna is used as the said reflector of at least one of the said additional antennas.

8. A transceiving device incorporating the antenna system of any of claims 1-7, a reception/transmission switch, a receiver, a transmitter, the control unit for the said antenna system for controlling the operation of the said antenna system in omnidirectional mode, directional scanning mode or stationary directional mode, and a controller, wherein the commutation switch of the said antenna system is connected to the first input/output of the reception/transmission switch, whose output is connected to the input of the receiver, and the second input connected to the output of the transmitter, the output of the receiver is connected to the first input of

the controller, the first output of the controller is connected to the said control unit, whose output is connected to the respective input of the said commutation switch of the antenna system, the second output of the controller is connected to the input of the transmitter, and the third output of the controller is designed for connection with the user's device serving data reception and/or transmission.

9. The transceiving device of claim 8, wherein it additionally incorporates a signal quality evaluation unit and a signal identification unit, at that, the output of the receiver is connected to the input of the signal quality evaluation unit and the input of the signal identification unit, the output of the signal quality evaluation unit is connected to the second input of the controller, to the third input of which the output of the signal identification unit is connected.

10. A portable network computer, including a case made of a display unit and a main unit joined together by a hinge, and a transceiving device fitted with the antenna system according to any of items 1-7, fixed to the said case with a hinge.

11. The computer of claim 10, wherein the said antenna system is fixed to the outside surface of the said display unit.

12. The computer of claim 10, wherein the said antenna system is fixed to the edge of the said display unit.

13. The computer of claim 10, wherein the said antenna system is fixed to the outside surface of the said main unit.

14. The computer of claim 10, wherein the said antenna system is made detachable.

15. The computer of claim 10, wherein the transceiving device is made in accordance with any of items 8-9.